

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on July 16, 2001
By: [Signature]
Printed: Jeanette G. Labra

Docket No.: PE-025132 DIV C

SEP -6 2001
TC 2800 MAIL ROOM

RECEIVED

SEP 07 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Hillman et al.

Title: NOVEL CALCIUM-BINDING PROTEIN

Serial No.: 09/768,840

Filing Date:

January 23, 2001

Examiner: To Be Assigned

Group Art Unit:

1653

Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, D.C. 20231

TECH CENTER 1600/2900

RECEIVED

SEP -7 2001

REQUEST FOR A CORRECTED FILING RECEIPT

Sir:

Attached is a copy of the Official Filing Receipt received from the United States Patent and Trademark Office in the above application for which issuance of a corrected filing receipt is respectfully requested. Please correct the Official Filing Receipt as indicated in red on the attached copy of the Official Filing Receipt. Please change the following information to the Official Filing Receipt to read as: "CONTINUING DATA AS CLAIMED BY APPLICANT--- THIS APPLICATION IS A DIV OF 09/206,499 12/07/1998 PAT 6,194,385 WHICH IS A DIV OF 08/828,242 03/21/1997 PAT 5,871,970." Support for this continuing information can be found, for example, on page 1 of the specification filed with the present application, a copy of which accompanies this Request.

Applicants believe that no fee is due with this paper. However, if the Commissioner determines that any fee is necessary, the Commissioner is hereby authorized to charge any

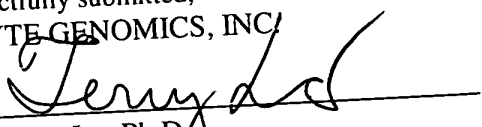
09/768,840

additional fees associated with this communication or credit any overpayment to Deposit

Account No. 09-0108. A duplicate of this communication is enclosed.

Date: July 16, 2001.

Respectfully submitted,
INCYTE GENOMICS, INC.


Terence P. Lo, Ph.D.

Limited Recognition (37 C.F.R. § 10.9(b)) attached
Direct Dial Telephone: (650) 621-8581

3160 Porter Drive
Palo Alto, California 94304
Phone: (650) 855-0555
Fax: (650) 845-4166



UNITED STATES PATENT AND TRADEMARK OFFICE

FILE COPY

 COMMISSIONER FOR PATENTS
 UNITED STATES PATENT AND TRADEMARK OFFICE
 WASHINGTON, D.C. 20231
 www.uspto.gov


Bib Data Sheet

CONFIRMATION NO. 2899

SERIAL NUMBER 09/768,840	FILING DATE 01/23/2001 RULE	CLASS <i>SR XXX</i> 530	GROUP ART UNIT 1642 2899 <i>SR 1655</i>	ATTORNEY DOCKET NO. PF-0261-2 DIV
------------------------------------	---	--------------------------------------	--	---

APPLICANTS

 Jennifer L. Hillman, Mountain View, CA;
 Surya K. Goli, Sunnyvale, CA;

** CONTINUING DATA *****

 THIS APPLICATION IS A DIV OF 09/206,499 12/07/1998 PAT 6,194,385
 WHICH IS A DIV OF 08/828,242 03/31/1997 PAT 5,871,970
SR

** FOREIGN APPLICATIONS *****

IF REQUIRED, FOREIGN FILING LICENSE GRANTED

** 03/06/2001

Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	STATE OR COUNTRY CA	SHEETS DRAWING 6	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 2
35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance <i>SR</i>				
Verified and Acknowledged Examiner's Signature <i>SR</i> Initials				

ADDRESS

 INCYTE GENOMICS, INC
 PATENT DEPARTMENT
 3160 Porter Drive
 Palo Alto, CA 94304

TITLE

Calcium-binding protein

 FILING FEE
 RECEIVED
 710

 FEES: Authority has been given in Paper
 No. _____ to charge/credit DEPOSIT ACCOUNT
 No. _____ for following:

- | |
|--|
| <input type="checkbox"/> All Fees |
| <input type="checkbox"/> 1.16 Fees (Filing) |
| <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) |
| <input type="checkbox"/> 1.18 Fees (Issue) |
| <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Credit |

RECEIVED

SEP 07 2001

TECH CENTER 1600/2900

RECEIVED



RECEIVED Page 1 of 4

SEP 07 2001

UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

TECH CENTER 1600/2900

SEP - 6 2001

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

TC 2800 MAIL ROOM

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/768,840	01/23/2001	1653	710	PF-0261-2 DIV	6	20	2

CONFIRMATION NO. 2899

FILING RECEIPT



OC000000005915606

INCYTE GENOMICS, INC
PATENT DEPARTMENT
3160 Porter Drive
Palo Alto, CA 94304

Date Mailed: 03/29/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Jennifer L. Hillman, Mountain View, CA;
Surya K. Goli, Sunnyvale, CA;

Assignment For Published Patent Application

Incyte Pharmaceuticals, Inc.,;

Continuing Data as Claimed by Applicant

THIS APPLICATION IS A DIV OF 09/206,499 12/07/1998 PAT 6,194,385
WHICH IS A DIV OF 00/020,242 03/21/1997 PAT 5,883,023

(*) Data inconsistent with PTO records.

08/828,242

5,871,970

TC 1600 MAIL ROOM

SEP - 7 2001

RECEIVED

Foreign Applications

If Required, Foreign Filing License Granted 03/06/2001

Projected Publication Date: 07/05/2001

Non-Publication Request: No

Early Publication Request: No

Title

Calcium-binding protein

RECEIVED

SEP -6 2001

TC 2800 MAIL ROOM

Preliminary Class

514

Data entry by : AMARE, TSION

Team : OIPE

Date: 03/29/2001

SEP 07 2001

TECH CENTER 1600/2900
RECEIVED
SEP -6 2001
TC 2800 MAIL ROOM

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 36 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

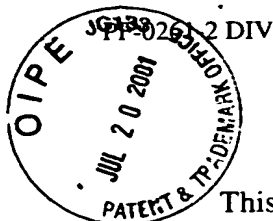
No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

PLEASE NOTE the following information about the Filing Receipt:

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 600 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, DC 20231



CALCIUM-BINDING PROTEIN

RECEIVED

SEP - 5 2001

TC 2800 MAIL ROOM

TECH CENTER 1600/2900

SEP 07 2001

RECEIVED

This application is a **DIVISIONAL** application of U.S. application serial number 09/206,499, filed December 7, 1998, entitled NOVEL CALCIUM-BINDING PROTEIN,

- 5 which is a divisional of U.S. application serial number 08/828,242, filed March 31, 1997, which issued on February 16, 1999 as U.S. Patent No. 5,871,970, entitled CALCIUM-BINDING PROTEIN. Both of these applications are hereby expressly incorporated by reference.

FIELD OF THE INVENTION

10 This invention relates to nucleic acid and amino acid sequences of a novel calcium-binding protein and to the use of these sequences in the diagnosis, prevention, and treatment of disorders associated with cell proliferation.

BACKGROUND OF THE INVENTION

15 Calcium plays essential roles in various cell processes including cell metabolism, muscle contraction, molecular secretion and mitogenesis. Calcium is mostly stored in endoplasmic reticulum (ER) in non-muscle cells, and in the sarcoplasmic reticulum (SR) in muscle cells. The regulation of calcium involves a family of homologous, calcium-binding
20 proteins such as calbindins, troponin C, calmodulin, and S-100 proteins. These proteins contain a common structural motif, the EF-hand motif, which consists of two α -helices separated by a loop of 12 to 13 amino acid residues.

Some proteins identified in the lumen of ER, such as BiP, protein disulfide isomerase, calreticulin, and endoplasmin, are also involved in the regulation of calcium. These proteins
25 do not have the EF-hand motif; they are retained in the lumen by a membrane-bound receptor. The receptor retrieves the luminal ER proteins from Golgi apparatus to the ER lumen by recognizing their carboxy-terminal tetrapeptide, Lys-Asp-Glu-Leu (KDEL) or His-Asp-Glu-Leu (HDEL). An exception to these ER proteins is reticulocalbin, a luminal protein of the ER which possesses both the EF-hand motif and the ER-retention signal, HDEL (Ozawa, M.
30 and Muramatsu, T. (1993) J. Biol. Chem. 268:699-705; Ozawa, M. (1995) J. Biochem. 117: 1113-1119). In fact, the mouse reticulocalbin, a 44 kDa protein, has six repeats of the EF-hand motif. The human reticulocalbin, which shares 95% identity with its mouse homolog,



**UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE**

RECEIVED
SEP - 6 2001
TC 2800 MAIL ROOM

TECH CENTER 1600/2900

SEP 07 2001

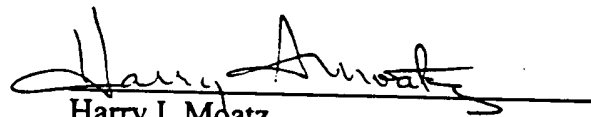
RECEIVED

LIMITED RECOGNITION UNDER 37 CFR §10.9(b)

Terrence Lo is hereby given limited recognition under 37 CFR §10.9(b) as an employee of Incyte Pharmaceuticals, Inc. to prepare and prosecute patent applications wherein Incyte Pharmaceuticals, Inc. is the assignee of record of the entire interest in the application filed in the USPTO. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Terrence Lo ceases to lawfully reside in the United States; (ii) Terrence Lo's employment with Incyte Pharmaceuticals, Inc. ceases or is terminated; or (iii) Terrence Lo ceases to remain or reside in the United States on TN status.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: November 18, 2001


Harry I. Moatz
Director of Enrollment and Discipline

RECEIVED
SEP - 7 2001
TC 2800 MAIL ROOM